diphosphohydrolase sufficiently to reduce platelet aggregation and thrombogenicity in the human or nonhuman animal, said ATP diphosphohydrolase having the amino acid sequence defined in SEQ ID NO:1, or a variant thereof, or a part thereof, said variant or part being capable of converting ATP to ADP and ADT to AMP.

B. The applicants hereby elect the invention of Group II (Claim 3) drawn to an ATP diphosphohydrolase as defined in Claim 3. The applicants further elect the species of the ATP diphosphohydrolase comprising an amino acid sequence defined in SEQ ID NO:7 and having a catalytic unit of molecular weight of about 54 Kda (species B<v> as indicated in the Requirement). Claims 3, 10 and 12 read on the elected species. The elections are made with traverse.

The Restriction Requirement is traversed on the basis that restriction requirements are optional in all cases. MPEP § 803. If the search and examination of a set of claims can be made without serious burden, the Examiner must examine them on the merits, even though they may arguably directed at distinct or independent inventions. MPEP § 803. In the present application, it is respectfully submitted that claims in Groups I, II and IV and amended Claims 14 and 15 can be examined without serious burden on the Office. Further, the election of species is not necessary for the same reason.

Firstly, claims in Groups I and II are closely linked. Claims 1 and 2 (Group I) are directed at an ATP diphosphohydrolase isolated from bovine aorta and Claim 3 (Group II) is directed at an ATP diphosphohydrolase isolated from pig pancreas. A proper search for either group would inevitably overlap with that for the other and both searches would involve ATP diphosphohydrolase in general. As a consequence, the search result for one group would certainly have relevance to the other. Under this circumstance, it is not burdensome on the Office to examine these claims together. On the contrary, it will be unnecessarily burdensome on both the applicants and the Office to consider the highly related subject matter in several separate patent applications.

Secondly, amended Claim 14 is directed at method of using the diphosphohydrolase in Claim 1 to reduce platelet aggregation and thrombogenicity. Thus, a proper search for Claim 14 would inevitably overlap with that for Claims 1 and 2 and the search results for one has relevance over the other. For example, if the search for Claim 1 shows that the

diphosphohydrolase is new, the Claim 14 would be novel for the same reason. Accordingly, examination of Claim 14 can be conducted with claims in Group I and II without serious burden. On the contrary, it will be unnecessarily burdensome on both the applicants and the Office to consider the highly related subject matter in several separate patent applications.

Thirdly, Claim 16 (Group IV) and amended Claim 15 are closely related. Claim 16 is directed at a composition that contains an ATP diphosphohydrolase defined by SEQ ID NO:1 and Claim 15 is directed at a method of using the ATP diphosphohydrolase defined by SEQ ID NO:1 to reduce platelet aggregation and thrombogenicity. Thus, a proper search for Claim 16 would inevitably overlap with that for Claim 15 and the search results for one has relevance over the other. Accordingly, examination of Claim 15 can be conducted with Claim 16 without serious burden. On the contrary, it will be unnecessarily burdensome on both the applicants and the Office to consider this highly related subject matter in several separate patent applications.

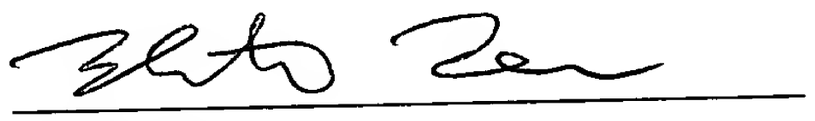
Finally, claims in Groups I and II and Claim 14, and the claim in Group IV and Claim 15 are closely linked. They are directed at either ATP diphosphohydrolases from different sources or compositions containing same, or a method of using the ATP diphosphohydrolases to reduce platelet aggregation and thrombogenicity. The ATP diphosphohydrolases involved in these claims share a high degree of homology (see page 32 lines 1-4 of the application). Therefore, proper searches for these claims would significantly overlap with each other (e.g., all would involve ATP diphosphohydrolase in general) and the search results for one have relevance to the others. Accordingly, examination of all these claims can be conducted without serious burden. On the contrary, it will be unnecessarily burdensome on both the applicants and the Office to consider the highly related subject matter in several separate patent applications. For these same reasons, election of species is not necessary.

For the reasons discussed above, it is requested that the restriction requirement with regard to Groups I, II and IV and the election of species requirement be reconsidered and withdrawn.

Wherefore examination on the merits is respectfully requested.

A petition for five months extension of time accompanies this response so that the response will be deemed to have been timely filed. If any other extension of time is required in this or any subsequent response, please consider this to be a petition for the appropriate extension and a request to charge the petition fee to the Deposit Account No. 17-0055. No other fee is believed to be due in connection with this response. However, if any fee is due in this or any subsequent response, please charge the fee to the same Deposit Account No. 17-0055.

Respectfully submitted,



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